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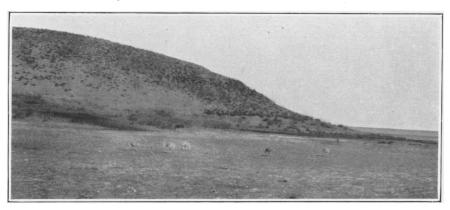
Mar., 1908

## NOTES ON THE RHEA OR SOUTH AMERICAN OSTRICH

By SAMUEL ADAMS

HE market place of a South American city abounds with interest for the traveller. Here under one roof are piled in profusion the varied fruits and vegetables, meats, fish and game of the locality, and they are sure to interest the newcomer, appealing either to his tastes or his curiosity. I was especially anxious for some reason or other to taste a rhea's egg after seeing one in the market, and when I did I made a meal of it and regretted what I had done for several hours after. The flesh of the rhea like its eggs is very rich and gamy, and with a novice a little goes a long way.

There are two species of Rhea. The larger, *Rhea americana*, ranges from Southern Brazil and Paraguay southward thru Uruguay and northern Argentina into Patagonia, southern Argentina, as far south as the Rio Negro. *Rhea darwini*, the smaller of the two, is a Patagonian bird, overlapping the range of the other on the south and extending as far as the Straits of Magellan. In their habits the



SOME RHEAS FEEDING ON ONE OF THE FARMS; A SHEEP GRAZING NEAR TWO OF THEM

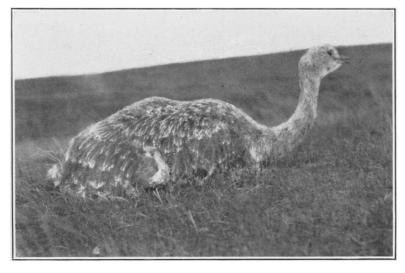
two birds are said to be practically alike, and their appearance does not differ greatly. The general color is a dark grey, the tips of the back feathers and the quills being white. I have seen a rhea in a menagerie, the back and wings of which were a solid white. Whether this bird was a freak or another species, I am not prepared to say as I have never seen it described. At a distance the dusky cast of the southern bird blends with the Patagonian landscape and makes its detection at times almost impossible. The males of both species are slightly darker than the females, but it takes an experienced eye to tell them apart at a distance. The plumes of the rhea are adapted to some uses in millinery but they are very filmy and in no way compare with those of the African ostrich. They are chiefly used to make dusters and bed fillers. The rhea stands about three feet in height at the back and his foot-and-a-half neck brings his eyes some fifty inches from the ground.

In so desolate a region as Patagonia one might wonder what the rhea finds to eat the year around; doubtless many do starve in southern Patagonia during the severe winters when there is sufficient snow to keep them from the grass. In the summer months there are plenty of big black beetles and green grass and plants to keep them fat, and with the exception of Patagonia their range affords all the sustenance that is required at any season of the year. The rhea is a constant feeder in

the summer time in Patagonia and in the fall is fat and well prepared to weather the usually moderate winter that prevails there.

The family life of the rhea is not, like that of many birds, an open book to all who care to observe them. Their natural shyness and the barrenness of the country in which they live afford but few advantages for observation. The comparison of many notes made at various times by numerous careful observers has given us our most reliable data. This snatching little pieces here and there and putting them together has built up a life-history of the largest of living American birds. The tales of the gauchos in regard to the rhea as well as other animals, while entertaining and true in many details, border on the fanciful yarns of the dreaded nature fakirs and they never hesitate to supply essential points if their own experience has not covered the gaps!

The rhea is said to be a polygamous bird, and the male incubates the eggs of several females, the process requiring six weeks. The females also lay many eggs in the camp or prairie to go unincubated. Whether she deposits eggs in more than



A WOUNDED Rhea darwini

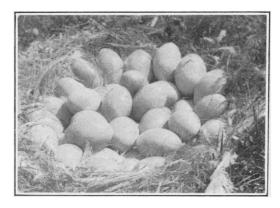
one nest is not known, tho it seems possible, for they wander over much ground. The hens are not rapid layers. A bird in captivity is known to have dropped one egg every three days for a period of seven weeks. The size too of the clutch varies widely; as few as a dozen and as many as half a gross have been found in a single nest. In these larger nests the difference in the ages of the eggs is very noticeable. The fresh eggs have a beautiful greenish tinge which fades rapidly during incubation or exposure on the pampa. It is claimed by some observers that the females assist the males in the incubation, but it seems that this is only for a small part of the time. The size of the nest may depend largely on the number of the females, but the diameter of the nest is almost a constant factor, the variation being in the depth, for eggs are sometimes found as much as a foot or more below the upper layer buried in debris and dirt. A gaucho told me that these eggs were buried so that the old birds could break them on the ground when the young were hatched to draw flies for their first food. I think it was just the result of overcrowding, and not necessarily premeditated.

The young bird is quick to grasp the spirit of his wild existence and leaves the nest when scarcely dry. When left alone they feed together in a flock, eagerly running after insects, and picking at everything that looks green and tempting. His free life makes him jealous of his liberty and it is difficult to capture a young bird. Once caught, however, they are easily tamed, and except for their fondness for houseplants and garden truck they would make a handsome fowl about the farm.

On the open pampa the rhea is a very shy bird, making off at the first approach of danger. If a choice of direction permits he chooses the wind and runs against it with wings outstretched when greatly alarmed. A horse is no match whatever in speed or endurance on a fresh start, and the native hunter aims to exhaust the bird with dogs, and then approach closely enough, if necessary with a final dash to ensare him with the bolas. The farmers on some of the ranches forbid the molestation of the rheas by the peons or their dogs, and thus afford in season an abundance of fresh eggs close at hand. These birds, accustomed to the sight of man, gave me a chance to photograph them at rather close range, but the lack of contrast in their outline and that of their background makes the picture quite unsatisfactory.

The rhea hunter of the pampa is a picturesque character and a typical nomad.

A few well-seasoned horses and a troupe of half a dozen dogs with long legs and plenty of endurance form the chief part of his outfit. A recado or blanket saddle furnishes at once a seat and a bed: a small kettle to boil water for his maté or native tea, with its drinking outfit is the extent of his culinary equipment, and matches, tobacco, a knife and the bolas complete the outfit. He lives on roasted meat and maté. The hunter follows the game over the open pampa or along the water sheds tributary to the lakes or rivers



NEST OF Rhea darwing WITH 42 EGGS

and unless it takes to the water it is almost invariably captured due to the relentless pursuit, since time plays no part. The rhea is a strong swimmer and has been seen to voluntarily cross a river for the sake of better feeding grounds. The task is evidently not greatly distasteful to him.

The method of cooking the rhea and its eggs invented by the indians is ingenious and effective; the idea of simplicity has been generally adopted by the peons, in Argentina at least, to the cooking of meats in general. The flesh on the carcass of the rhea is tender and delicious while the leg meat is as tough as sole leather, and is not eaten unless food is scarce. The indians after removing the viscera thru a small opening in the abdomen fill the cavity with hot stones about the size of tennis balls and leave the bird to roast with the skin on. The eggs when not eaten raw are prepared by roasting in the hot ashes, after breaking the shell at one end so the contents may have room to expand and be stirred. Piles of the smooth stones used in the cooking process are found about the old camping grounds on the pampa and testify to the antiquity of the custom. The skins of the rhea are frequently used by the indians for bed mats, and they have devised a tobacco pouch out of the neck skin which they peel from the shoulders toward the head without making a longitudinal opening. By stretching and drying this and putting in a few stitches in the bottom they have a very serviceable pouch.

Topeka, Kansas.